

# Notice of Allowability

Application No.

10/072,629

Examiner

Therese Barber

Applicant(s)

HSU ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 17 October 2003.
2. ☒ The allowed claim(s) is/are 16-38 and 44-51.
3. ☒ The drawings filed on 3 June 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

- |   |   |
|---|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____             |
| 5 <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. <u>4543</u> | 6 <input type="checkbox"/> Examiner's Amendment/Comment                             |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material    | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|   | 9 <input type="checkbox"/> Other  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings were received on 3 June 2002. The examiner accepts these drawings.

### ***Allowable Subject Matter***

2. Claims 16-38 and 44-51 are allowed.
3. The following is an examiner's statement of reasons for allowance:

Regarding claims 16-22, the claims are allowable over the prior art of record for at least the reason that the prior art fails to teach or to reasonably suggest an optical device having a first light guiding structure mounted to a fixed structure; a second light guiding structure mounted to the movable structure; and the fixed structure including a base and an overhang portion having dimensions such that when the optical device is subject to a thermal distortion, the ends of the first and second light guiding structures maintain alignment with each other to be capable of propagating an optical signal, as set forth in the claimed combination.

Regarding claims 23-32, the claims are allowable over the prior art of record for at least the reason that the prior art fails to teach or to reasonably suggest an optical device having a first light guiding structure mounted to a fixed structure; a second light guiding structure mounted to the movable structure; wherein the ends of the first and second light guiding structures are aligned and the ends of the first and second light guiding structures are configured to maintain

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alignment with each other in the presence of thermal distortion so that the first and second light guiding structure can propagate an optical signal, as set forth in the claimed combination.

Regarding claims 34-38, the claims are allowable over the prior art of record for at least the reason that the prior art fails to teach or to reasonably suggest an optical device having a first light guiding structure mounted to a fixed structure; a second light guiding structure mounted to a movable structure wherein the ends of the first and second light guiding structures are aligned; a third light guiding structure formed on the second light guiding structure; and the ends of the first and second light guiding structures maintain alignment with each other in the presence of thermal distortion so that the first and second light guiding structure can propagate an optical signal, as set forth in the claimed combination.

Regarding claims 44-51, the claims are allowable over the prior art of record for at least the reason that the prior art fails to teach or to reasonably suggest an optical device having a suspended structure having a first and a second surfaces on the opposite sides, wherein a light guiding structure is disposed on the first surface of the suspended structure and a thermal distortion offset structure formed on the second surface of the suspended structure, the thermal distortion offset structure configured to counteract a thermal distortion to the first surface of the suspended structure, as set forth in the claimed combination.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

4. It is noted that the applicants cancelled claims 1-15 and 39-43 in the Election/Response filed on 6 May 2003.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Labeye (USPN 5,612,815) discloses an optomechanical device comprised of an integrated optics guiding structure having a fixed part and a mobile part, wherein fixing arms connected the mobile part to the fixed part, in order, to permit switching of a light beam from an input microguide(s) to one of the output microguide(s).

Labeye (USPN 5,848,206) discloses an optical device that can be utilized in optomechanical or micromechanical systems comprised of two compensating arms that are rigid in the vertical direction and flexible in the horizontal direction in order to limit the deformations of the light beam.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Therese Barber whose telephone number is (571) 272-2486. The examiner can normally be reached on Monday to Friday from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4900.

th 

9 January 2004



**EDWARD J. GLICK**  
**SUPERVISORY PATENT EXAMINER**